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ATTY DOCKET NO.. APPLICATION NO. NYA FORM PTO 1449 (modified) 01311.001005.1... Div. Of 09/982,626 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE . **APPLICANTS** JAMES K. CAVERS ET AL LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) FILING DATE **GROUP** 2819 Herewith U.S. PATENT DOCUMENTS *EXAMINER DOCUMENT FILING DATE INITIAL NUMBER DATE CLASS SUBCLASS 5,610,554 3/97 330 52 Anvari 4/97 330 5,617,061 Fukuchi 151 5,621,354 4/97 Mitzlaff 330 52 5,694,395 12/97 Myer et al. 370 480 5,742,201 4/98 Eisenberg et al. 330 2 Long in winds in the 330 5,831,478 11/98 **52** 5,815,036 9/98 Yoshikawa et al. 330 52 4.879.519 11/89 330 149 Myer . 4,379,994 4/83 330 Baumann 149 5,862,459 1/99 455 Charas 144 5,644,268 7/97 330 151 Hang 5,760,646 6/98 Beicher et al. 330 149 FOREIGN PATENT DOCUMENTS TRANSLATION COUNTRY DOCUMENT CLASS SUBCLASS DATE YES/NO/ NUMBER OR ABSTRACT EP **EPO** 0675594 10/95 4.3 OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) S. Grant, "A DSP Controlled Adaptive Feedforward Amplifier Linearizer," July, 1996. S. Grant and J. Cavers, "A DSP Controlled Adaptive Feedforward Amplifier Linearizer," ICUPC A. Smith, "A Wideband Adaptive Feedforward Amplifier Lineariser," August 1997. A. Smith and J. Cavers, "A Wideband Architecture For Adaptive Feedforward Linearization," May 18, 1998 DATE CONSIDERED EXAMINER

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FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)				ATTY DOCKET NO. 01311.001005.1	APPLICATION NO. Div. of 09/982,626					
				APPLICANT JAMES K. CAVERS ET AL.						
				FILING DATE GROUP 2819			319			
			ı	U.S. PATENT DOCUMENTS						
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE			
	5,307,022	4/94	Ι.	Tattersail, Jr. et al.	330	52				
	5,532,642	7/96	·	Takal	330	15				
	5,789,976	8/98		Ghannouchi et al.	330	52				
1	5,565,814	10/96		Fukuchi	330	52				
11-	5,485,120	1/96		Anvari	330	151				
	5,489,875	2/96		Cavers	- 330	151				
	6,208,207	3/01		Cavers "	330	149				
	6,166,601	12/00		Shalom et al.	330	151				
	5,157,345	10/92		Kennington et al.	330	149				
	5,130,633	7/92	/	Tattersall, Jr.	330	52				
	5,867,065	2/99		Leyendecker	330	149				
·			FO	REIGN PATENT DOCUMENTS	<u> </u>					
	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT			
ブレー	58 175309	10/14/83		Japan						
		OTHER DOCU	UMENT(S)	(Including Author, Title, Date, Pertinent Pages, Etc.)						
	F. Amoroso,	"Spectral C	ontain	ment By PreDistortion of OQPSK S	ignal,"	October, 19	998.			
	J. Cavers, "A	J. Cavers, "Adaption Behavior of a Feedforward Amplifier Linearizer," February, 1995.								
A	Q. Cheng, et	Q. Cheng, et al., "A 1.9 GHZ Adaptive Feedforward Power Amplifier, November, 1998.								
		J.C. Lagarias, et al. Convergence Properties of the Nedler-Mead Simplex Algorithm in Low Dimensions, SAIM J. Optim. May, 1997								
		P.B. Kennington and D.W. Bennett, Linear Distortion Correction using Feed-forward System, IEEE Trasnactions on Vehicular Technology Vol 45 No 1 (Feb. 1996)———————————————————————————————————								
	J. Chen, et al., Adaptive joint lineralisation / equilisation with delay alignments for a wideband power amplifier, March, 1998									
EXAMINER	/////	9/1////	. (DATE CONSIDERED 12/0/	10	6.				
					/	<u></u>				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

10/780,658

FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			ATTY DOCKET NO. APPLICATION NO. Div. of 09/982,626							
			APPLICANTS JAMES K. CAVERS ET AL.							
			FILING DATE Herewith			319				
	عيد				J.S. PATENT DOCUMENTS	· · ·				
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE					SUBCLASS	FILING DATE	
		5,898,339	4/99		Maruyama et al.			151		
		6,075,411	6/00		Briffa et al.		330	149		
V		6,414,546	7/02	, ·	Cavers		330	149		
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)										
J.T. Chen, H.S. Tsai and Y.K. Chen, Fast Adaptive Wide-band Power Amplifier Feed-forward Linearizer, IEEE Vehicular Technology conference, Ottawa, (1998)										
		J.K. Cavers, Convergence Behavior of an Adaptive Feed-forward Linearizer, IEEE Vehicular Technology Conference, (1994).								
ħ.		F.T. Luk and S. Qiao, Analysis of a Recursive Least-squares Signal Processing Algorithm, Society for Industrial and Applied Mathematics, Vol 10, No. 3, (May 1989)								
h ,	-2	S. Ljung and L. Ljung, Error Propagation Properties of Recursive Least-squares Adaptation Algoritims, Automatica, Vol. 21, No. 2 (1985)								
		E. Eweda and O. Macchi, Convergence of the RLS and LMS Adaptive Filters, IEEE Transactions on Circuits and Systems, Vol. CAS-34, No. 7, (July 1987)								
		D.H. Shl and F. Kozin, On Almost Sure Convergence of Adaptive Algorithms, IEEE Transactions on Automatic Control, Vol. AC-31, No. 5, (May 1986)								
	*	L.L. Horowitz and K.D. Seene, Performance Advantage of Complex LMS for Controlling Narrow-band Adaptive Arrays, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-29, No. 3, (June 1981)								
		G.A. Clark, S.K. Mitra, and S.R. parker, Block Implementation of Adaptive Digital Filters, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-29, No. 3, (June 1981)								
		A. Feuer, Performance Analysis of the Block Least Mean Square Algorithm, IEEE Transactions on Circuits and Systems, Vol. CAS-32, No. 9, (July 1985)								
		S.S. Narayan, A.M. Peterson, M.J. Narasimha, Transform Domain LMS Algorithm, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-31, No. 3, (June 1983)								
		G.A. Clark, S.R. Parker, and S.K. Mitra, A Unified Approach to Time- and Frequency- Domain Realization of FIR Adaptive Digital Filters, IEEE-Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-31, No. 5, (October 1983)								
		G. Panda, B. Mulgrew, C.F.N. Cowan, and P.M. Grant, A Self-Orthogonalizing Efficient Block Adaptive Filter, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-34, No. 6, (December 1986)								
EXAMINER /		/////	011/10		DATE CONSIDERED /2	18/1	0-6			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE			ATTY DOCKET NO. 01311.001005.1							
LIST OF	ATENT AND TRADEMARK (REFERENCES CITED BY A	PPLICANT(S)	APPLICANTS JAMES K. CAVERS ET AL.							
(Use several sheets if necessary)			FILING DATE Herewith GROUP 2819			19				
U.S. PATENT DOCUMENTS										
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME CLAS		SUBCLASS	FILING DATE IF APPROPRIATE				
1 N-	5,912,586	6/99	James Edward Mitzlaff	330	149					
	5,923,214	7/99	James E. Mitzlaff	330	52					
	6,456,160 B1	9/02	Nakayama et al.	330	52					
										
		OTHER DOCUMENT	(S) (Including Author, Title, Date, Pertinent Pages, Etc.)	· · · · · · · · · · · · · · · · · · ·						
	Stepsizes, IEE	J.Chao, H. Perez, and S. Tsujii, A Fast Adaptive Filter Algorithm Using Eigenvalue Reciprocals as Stepsizes, IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. ASSP-38, No. 8, (August 1990)								
7-11	S.J. Elliot and I	S.J. Elliot and B. Fafaely, Rapid Frequency-Domain Adaptation of Causal FIR Filters, IEEE Signal Processing Letters, Vol. 4, No.12, (December 1997)								
		R.M. Gray, On the Asymptotic Elgenvalue Distribution of Toeplitz Matrices, IEEE Transactions on Information Theory, Vol. IT-18, No.6, (November 1972)								
	M. Johansson	M. Johansson and L. Sundstrom, Linearization of RF Mulitcarrier Amplifiers using Cartesian Feedback, Electronic Letters, Vol. 30, No. 14, (July 7, 1994)								
	Hau et al. "Design and characterization of a microwave fee-forward amplifier with improved wide-band distortion cancellation" IEEE Transactions on Microwave Theory and Techniques, vol. 49, Issue 1, January 2001, pages 200-203.									
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